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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re ~~PATENT~~ application of:

) Date: September 15, 2006

Michael H. Gilbert

) Attorney Docket No.: F-120

Serial No.: 09/728,152

) Customer No.: 00919

Filed: December 1, 2000

) Group Art Unit: 3624

Confirmation No.: 4441

) Examiner: Kelly Scaggs Campen

Title: METHOD AND SYSTEM FOR VERTICAL MESSAGING, BILLING AND PAYMENT SERVICES

TRANSMITTAL OF APPEAL BRIEF (PATENT APPLICATION 37 CFR 1.192)

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Sir:

Transmitted herewith is the **APPEAL BRIEF** in the above-identified patent application with respect to the Notice of Appeal filed on July 21, 2006.

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Name of Person Certifying

Application No. 09/728,152  
Appeal Brief: September 15, 2006  
Attorney Docket No. F-120



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re patent application of:	) Date: September 15, 2006
Michael H. Gilbert	) Attorney Docket No.: F-120
Serial No.: 09/728,152	) Customer No.: 00919
Filed: December 1, 2000	) Group Art Unit: 3624
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Title:	METHOD AND SYSTEM FOR VERTICAL MESSAGING, BILLING AND PAYMENT SERVICES

**APPELLANT'S BRIEF**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on July 21, 2006.

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**I. Real Party in Interest**

The real party in interest in this appeal is Pitney Bowes Inc., a Delaware corporation, the assignee of this application.

**II. Related Appeals and Interferences**

There are no related Appeals and Interferences.

**III. Status of Claims**

- A) Claims 1 - 40 are in the application.
- B) Claims 20 – 40 have been cancelled
- C) Claims 1 - 19 are rejected.
- D) Claims 1 - 19 are on appeal

**IV. Status of Amendments**

No Amendment subsequent to the April 21, 2006, Final Rejection was entered.

**V. Summary of Claimed Subject Matter**

The claimed invention provides a method for acquiring raw usage data for a service from a meter (such as a meter measuring consumption of energy services) and providing all billing and payment processing services for various service providers across multiple tiers that cooperatively provide the service..

Claim 1 is the only independent claim in this application. Claim 1 relates to a method of generating and processing billing and payment information utilizing computing units connected to a network for a service provided cooperatively by multiple tiers Claim 1 includes the following steps:

collecting by a first computer unit usage information (200, 201) of the service by a customer from one of a first tier of the multiple tiers or a third party;

integrating by a second computer unit usage information (500) with customer profile information (502) of the customer provided by a second tier of the multiple tiers;

generating by a third computer unit billing information (502) based on the usage information (500), the customer profile information (502), and rate information (503b) for the service; and  
transmitting by a fourth computer unit a bill (504a, 504b) based on the billing information to the customer.

Appellant's invention is shown in line 6 of page 11 to line 9 of page 13. Claim 1 is also illustrated in Figs. 5A and 5B.

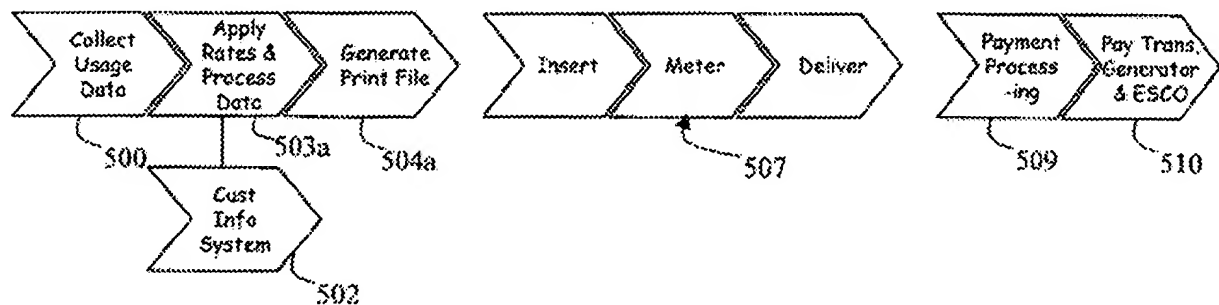


FIG. 5A

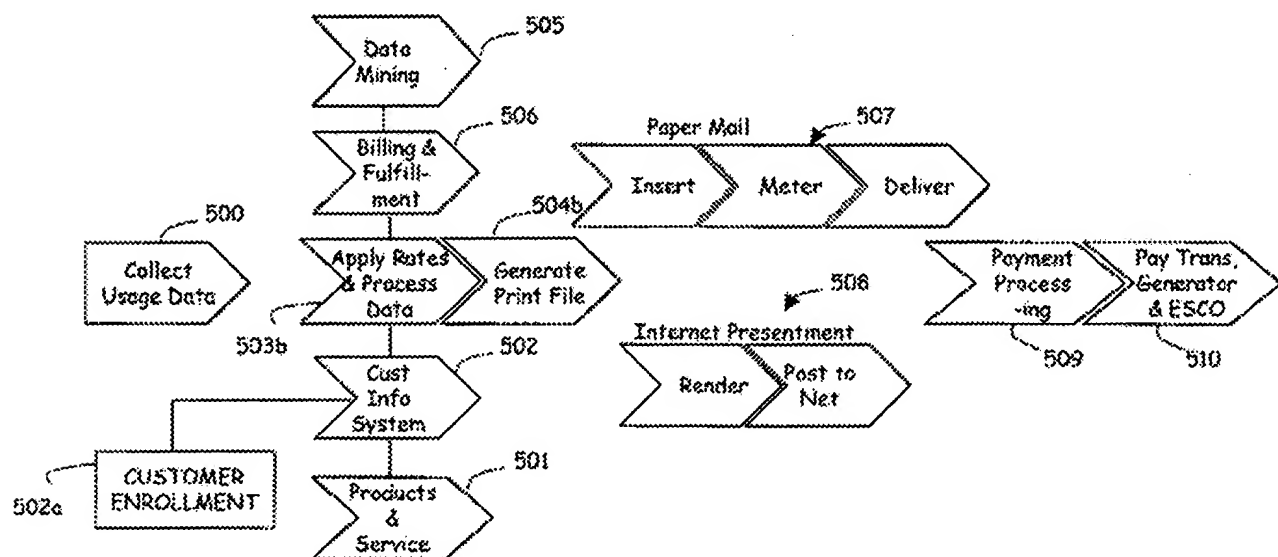


FIG. 5B

Figs. 5A and 5B show the process flows of two embodiments of the present invention. Fig. 5B illustrates the functions performed by one of the two embodiments of the present invention and compares the additional functionalities to the functionalities shown in Fig. 5A corresponding to the other of the embodiments discussed above with respect to Fig. 4. The embodiment shown in Fig. 5B shows that the utility company 200 or 201 (or a third party provider of such data) provides the usage or consumption data while all the remaining functionality is provided by the billing and payment services system 300 of the present invention (which may be provided, for example, by a separate provider of computerized information services (CIS)). Therefore, in step 500, the usage information is collected by either one of the energy service company 200, the transmission company 201, or a third party that collects such information (i.e. a meter reading entity), and provided to the billing and payment services system 300.

The billing and payment services system 300, according to this embodiment of the present invention, accesses the products and services related to the energy services in step 501 and the customer information (as discussed earlier herein) in step 502. As discussed earlier, the products and services and the customer records can be originated by one or more of the companies at one or more tiers that combine to provide the energy services. Examples of such products and services include, for example, energy commodity marketing, hedging prices, service or preventive maintenance contracts on energy equipment such as lights, HVAC, and other services that are ancillary to providing energy services.

Therefore, the energy services companies, the transmission companies, as well as the generation companies may have each customer information and products and services information. This information is accessed or stored by the billing and payment services system 300 of the present invention. Such access can be implemented in several ways. For example, each of the companies in the various tiers can provide data feeds, either in batch or online mode, so that the information can be stored by the billing and payment services system 300. Alternatively, some of the data may be stored by companies in the various tiers and this data may be accessed by the billing and payment services company 300 in either a batch or online mode. Furthermore, one of skill in the art would recognize that data required for constructing historical bills could be archived such that any required bills could be generated on-line if required. Such an on-demand generation of historical bills would prevent the need for storing large quantities of historical bills which may only be infrequently accessed.

Other functions that are provided by the billing and payment services system include data mining in step 505. The data mining functionality can be used both for cross-selling other items or services to the customers or for providing more efficient and better delivery of services to the customers. Some of the exemplary data mining functions that can be provided include forming

associations based on the database of transactions. For example, one set of information in a transaction may imply the presence of another set of items. For example, consumption patterns may correlate to bill payment habits.

Another data mining function can include classification in which customers can be classified into categories based on some attributes of customer or transaction information. Another data mining functionality can include detecting sequential patterns in transactions so that these patterns can be used for predictive purposes.

All of these "mined" information or patterns can be used for a variety of purposes including cross-selling, better delivery of services and maximizing the efficiency of production or delivery resources. In addition, this information could be used for predictive purposes to improve marketing, hedging, and better using power futures transactions to decrease cost and risk.

Another feature of the present invention provides a customer enrollment process 502a that provides for customer related information to be entered and transmitted to a customer information system 502 so that the customer information can be used to generate the billing information. According to the present invention, the customer enrollment function can be carried out any more than one of the multiple tiers that cooperate to provide the energy service to a customer. The customer information system 502 either stores or is configured to access the customer information from the customer enrollment process irrespective of which tier enrolls the customer.

In step 506, the billing and fulfillment functions include conventional accounting and book keeping processing (and their corresponding data processing steps) that tracks, for example, accounts receivables for each customer, and provides the information that can be used for tracking and allocating payments that are subsequently received from a customer.

## **VI. Grounds of Rejection to be Reviewed on Appeal**

Whether claims 1 - 19 are patentable under 35 U.S.C. §101, for being directed to non-statutory subject matter.

## **VII. Argument**

**Claims 1 - 19 have been rejected by the Examiner under 35 U.S.C. §101, for being directed to non-statutory subject matter.**

The Examiner stated the following in page 3 of the Final Rejection;

"The claimed method consists solely of the manipulation of an abstract idea and is not concrete or tangible. See *In re Warmerdam*, 33 F.3d1354, 1360, 31 USPQ2d, 1754, 1759 (Fed. Cir. 1994). See also *Schrader*, 22 F.3d at 295, 30 USPQ2d at 1459".

The following was stated *In re Warmerdam* at 31 USPQ2d, 1759

"Warmerdam's, other argument, that the manipulation of data as described in the claims constitutes or represents a sufficient level of physical activity to impart patentability to the claim, is not convincing. It is true, particularly with ideas expressed in mathematical form, that if a claim requires more than the manipulation of ideas so that the process described in the claim produces something quite different, then the process might indeed describe statutory subject matter. The problem with Warmerdam's argument is that the claims here do not have that effect. It is the claims which define the metes and bounds of the invention entitled to the protection of the patent system. "

The Examiner is misconstruing Appellant's claimed invention as it relates to the Warmerdam decision. Appellants' claims require more than the manipulation of ideas, thus the method may describe statutory subject matter. The claimed invention provides a method for generating and processing billing and payment information for a service provided cooperatively by multiple tiers or a third party, i.e., an energy service company, an energy transmission company, a meter reading company, etc. the system including computing units connected to a network such that a first computing unit collects usage information of the service by a customer from either a first tier of the multiple tiers or a third party; a second computing unit integrates the usage information with customer profile information for the customer provided by a second tier of the multiple tiers; a third computing unit generates billing information based on the usage information, the customer profile information, and rate information for the service; and a fourth computing unit transmits a bill based on the billing information to the customer. Appellants claimed invention obtains data from different sources to generate a physical bill.

The following was stated *In re Schrader* at 30 USPQ2d at 1458,1459".

"Moreover, the step of entering data into a "record" is implicit in any application of a mathematical algorithm. The recitation of such a step in a claim involving the solving of a mathematical algorithm merely makes explicit what had been implicit. A conclusion that such activity is sufficient to impart patentability to a claim involving the solving of a mathematical algorithm would exalt form over substance. A similar point was recognized in *Flook*, in which the Court concluded that the recitation of insignificant post-solution activity in a claim involving the solving of a mathematical algorithm could not impart patentability to the claim:



The notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance. A competent draftsman could attach some form of post-solution activity to almost any mathematical formula; ... The concept of patentable subject matter, under §101 is not "like a nose of wax which may be turned and twisted in any direction. . . ." *White v. Dunbar*, 119 U.S. 47, 51. *Flook*, 437 U.S. at 590.

Schrader's claims are thus not patentable.

"Arrhythmia is not to the contrary. The claims in *Arrhythmia* involved the manipulation of electrical signals and data representative of human cardiac activity; it was held that they recited patentable subject matter. 958 F.2d at 1053, 22 USPQ2d at 1033. For purposes of § 101, the claims were indistinguishable from the claims involving the manipulation of data representing CAT scan images held patentable in *In re Abele*, 684 F.2d 902, 214 USPQ 682 (CCPA 1982); or the, claims involving the manipulation of signals representative of reflected seismic energy held patentable in *In re Taner*, 681 F.2d 187, 214 USPQ 678 (CCPA 1982).

These claims all involved the transformation or conversion of subject matter representative of or constituting physical activity or objects. In *Arrhythmia*, it was electrocardiograph signals representative of human cardiac activity; in *Abele*, it was X-ray attenuation data representative of CAT scan images of physical objects; and in *Taner*, it was seismic reflection signals representative of discontinuities below the earth's surface. Schrader's claims, except for incidental changes to a "record," do not reflect any, transformation or conversion of subject matter representative of or constituting physical activity or objects. "

The Examiner is misconstruing Appellant's claimed invention as it relates to the Schrader decision. Appellant's claims involve the gathering and manipulation of customer usage information and a customer profile to generate a physical bill.

The Federal Circuit held the following in the case of *State Street Bank And Trust v. Signature Financial Group* 47USPQ2d 1596,1600:14.

"The plain and unambiguous meaning of § 101 is that any invention falling within one of the four stated categories of statutory subject matter may be patented, provided it meets the other requirements for patentability set forth in Title 35, i.e., those found in §§ 102; 103, and 112, ¶.2."

The repetitive use of the expansive term "any" in § 101 shows Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in § 101. Indeed, the Supreme Court has acknowledged that Congress intended § 101 to extend to "anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 309 [206 USPQ 193] (1980); see also *Diamond v. Diehr*, 450 U.S. 175, 182 [209 USPQ 1] (1981).<sup>3</sup> Thus, it is improper to read limitations into § 101 on the subject matter that may be patented, where the legislative history indicates that Congress clearly did not intend such limitations. See *Chakrabarty*, 447 U.S. at 308 ("We have also cautioned that courts 'should not read into the patent laws limitations and conditions which the legislature has not expressed.'" (citations omitted)).

The method of Appellant's claimed invention transmits a bill to a customer for services performed by multiple tier parties. These claims are, therefore, not directed to an abstract idea, but to a useful and practical application of the utilization of computers in the art of customer billing, and recite real-world structure or functionality to apply, involve, use or advance the technological arts. In particular, a real-world bill is transmitted to a real-world customer for multiple services performed by multiple tier parties.

Thus, Appellant's claimed invention is patentable under 35 U.S.C. §101.

**VIII. PRAYER FOR RELIEF**

Appellants' respectfully submit that appealed claims 1 - 19 in this application are patentable. It is requested that the Board of Appeal overrule the Examiner and direct allowance of the rejected claims.

Respectfully submitted,



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## VIII. CLAIMS APPENDIX

1. A method of generating and processing billing and payment information utilizing computing units connected to a network for a service provided cooperatively by multiple tiers 200, 201 , the method comprising the steps of:

collecting by a first computer unit usage information 500 of the service by a customer from one of a first tier of the multiple tiers or a third party;

integrating by a second computer unit usage information 500 with customer profile 502 information of the customer provided by a second tier of the multiple tiers;

generating by a third computer unit billing information 506 based on the usage information 500, the customer profile information 502, and rate information 503b for the service; and

transmitting by a fourth computer unit a bill 504a, 504b based on the billing information 506 to the customer.

2. The method according to claim 1, wherein the first computer unit collects the usage information from the first tier that includes a distributor of the service that is different from a generator or a provider of the service.

3. The method according to claim 1, wherein the second computer unit integrates the usage information with customer profile information provided by one of a generator, a distributor, or a provider of the service.

4. The method according to claim 1, wherein the third computer unit generates [step of generating] billing information using rate information from one of a generator, a distributor, or a provider of the service.

5. The method according to claim 1, wherein the fourth computer unit generates and transmits the bill to the customer in the form of a paper mailing.

6. The method according to claim 5, wherein the step of transmitting the bill to the customer includes the steps of:

printing the bill at an optimal mailing location based on address information of the customer; and mailing the bill from the optimal mailing location.

7. The method according to claim 6, wherein the optimal mailing location is determined based on at least one of a zip-code of the customer, a transportation cost, an environmental impact, or a mailing capacity of a mail distribution center.
8. The method according to claim 1, further comprising the steps of:  
processing by a fifth computer unit payment information received from the customer; and  
allocating by a sixth computer unit payments, based on the payment information, to pay service providers at the multiple tiers from the payment information received from the customer.
9. The method according to claim 8, wherein the step of allocating payments includes allocating payments to one or more of a generator, a distributor, or a provider of the service.
10. The method according to claim 1, wherein the service includes utility service.
11. The method according to claim 10, wherein the utility service includes one of power, water, gas, cable television, telephone, internet, or satellite television services.
12. The method according to claim 1, wherein the fourth computer unit transmits the billing information for electronic bill presentment to the customer using a public or private electronic network.
13. The method according to claim 12, wherein the public electronic network includes the Internet.
14. The method according to claim 1, wherein the step of transmitting the bill to the customer includes providing the billing information to a third party bill payment service.
15. The method according to claim 8, wherein the step of processing payment information includes using a third party authentication or verification service.
16. The method according to claim 1, further comprising the step of performing a seventh computer unit that is programmed to perform data mining using the usage information and the customer profile information.

17. The method according to claim 8, further comprising the step of performing data mining using the usage information, the customer profile information and the payment information.

18. The method according to claim 17, further comprising the step of using results of the data mining step to determine which additional services to offer to the customer.

19. The method according to claim 1, wherein the step of collecting usage information includes receiving by the first computer unit a direct feed of raw data from a metering company.

**IX. EVIDENCE APPENDIX**

There is no additional evidence to submit.

**XI. RELATED PROCEEDING APPENDIX**

There are no related Appeals and Interferences.